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A cationic polymer obtainable by free-radical copolymerization of

a) from 50 to 70% by weight of one or more monomers of the formula I

$$\begin{array}{c|c}
R^1 \\
CH_2 & R^2
\end{array}$$

 $X = O, NR^1,$   $R^1 = H, C_1-C_8-alkyl,$  $R^2 = tert-butyl,$ 

(b) from 5 to 45% by weight of one or more monomers of the formula II

$$CH_2$$
 $N$ 
 $O$ 
 $(CH_2)_n$ 

where n = 1 to 3,

- (c) from 5 to 40% by weight of a monoethylenically unsaturated monomer having at least one amine-containing group,
- (d) from 0 to 5% by weight of a polyalkylene oxide-containing silicone derivative,

where up to 40% by weight, based on (a), (b), (c) and (d), of the monomer (a) can be replaced by a monomer of the formula I where  $R^2 = C_2-C_{22}$ -alkyl.

- 40 2. A polymer as claimed in claim 1, obtainable by free-radical copolymerization of
  - (a) from 51 to 65% by weight of the monomer of the formula I,
- (b) from 7 to 39% by weight of the monomer of the formula II,
  - (c) from 10 to 30% by weight of the amine-containing monomer.

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- 3. A polymer as claimed in claim 1, wherein the monomer (a) is tert-butyl acrylate, N-tert-butylacrylamide and/or tert-butyl methacrylate.
- 5 4. A polymer as claimed in claim 1, wherein the monomer (b) is vinylpyrrolidone and/or vinylcaprolactam.
- A polymer as claimed in claim 1, wherein the monomer (c) is dimethylaminoalkyl (meth)acrylate and/or dimethylaminoalkyl
   (meth)acrylamide.
  - 6. A polymer as claimed in claim 1, wherein the monomers of the formula I where  $R^2 = C_2 C_{22} alkyl$  are N-butylacrylamide, N-octylacrylamide, lauryl (meth)acrylate or stearyl (meth)acrylate.
  - 7. The use of polymers as claimed in claim 1 to 6 for cosmetic preparations.
- 20 8. The use as claimed in claim 7 as setting polymers in hair spray, foam setting compositions, hair mousse, hair gel or shampoos.
- 9. A cosmetic preparation comprising a polymer as claimed in
  25 claim 1 in an amount of from 0.1 to 30% by weight, based on the preparation
  - 10. A cosmetic preparation as claimed in claim 9, wherein the polymer is partially or completely neutralized using a monohydric acid, preferably using a polyhydric acid or a polycarboxylic acid, or is quaternized using a quaternizing agent.
- 11. A cosmetic preparation as claimed in claim 10, wherein the polymer is partially or completely neutralized using phosphoric acid or an acid mixture containing phosphoric acid.
- 12. The use of polymers as claimed in one of claims 1 to 6 having
  40 a glass transition temperature of > 25°C and a K value of
  from 25 to 70, preferably from 35 to 50, for hair cosmetics.

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13. A hair cosmetic preparation comprising

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(a) from 0.2 to 20% by weight of a polymer as claimed in one of claims 1 to 6,

- (b) from 0 to 10% by weight of a conventional hair-setting polymer,
- (c) from 0 to 1% by weight of a water-dispersible siloxane-containing compound,
- (d) from 30 to 99.5% by weight of a solvent or solvent mixture of alcohol and water,
- (e) from 0 to 60% by weight of a propellant comprising dimethyl ether and/or propane/butane, and
- (f) from 0 to 0.3% by weight of a cosmetically suitable additive.
- 14. The use as claimed in claim 7 as a constituent in cosmetic 20 skin preparations.
  - 15. The use as claimed in claim 14, wherein a fatty acid amide is additionally used.

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